A Journal of the Gesellschaft Deutscher Chemiker

D 3461

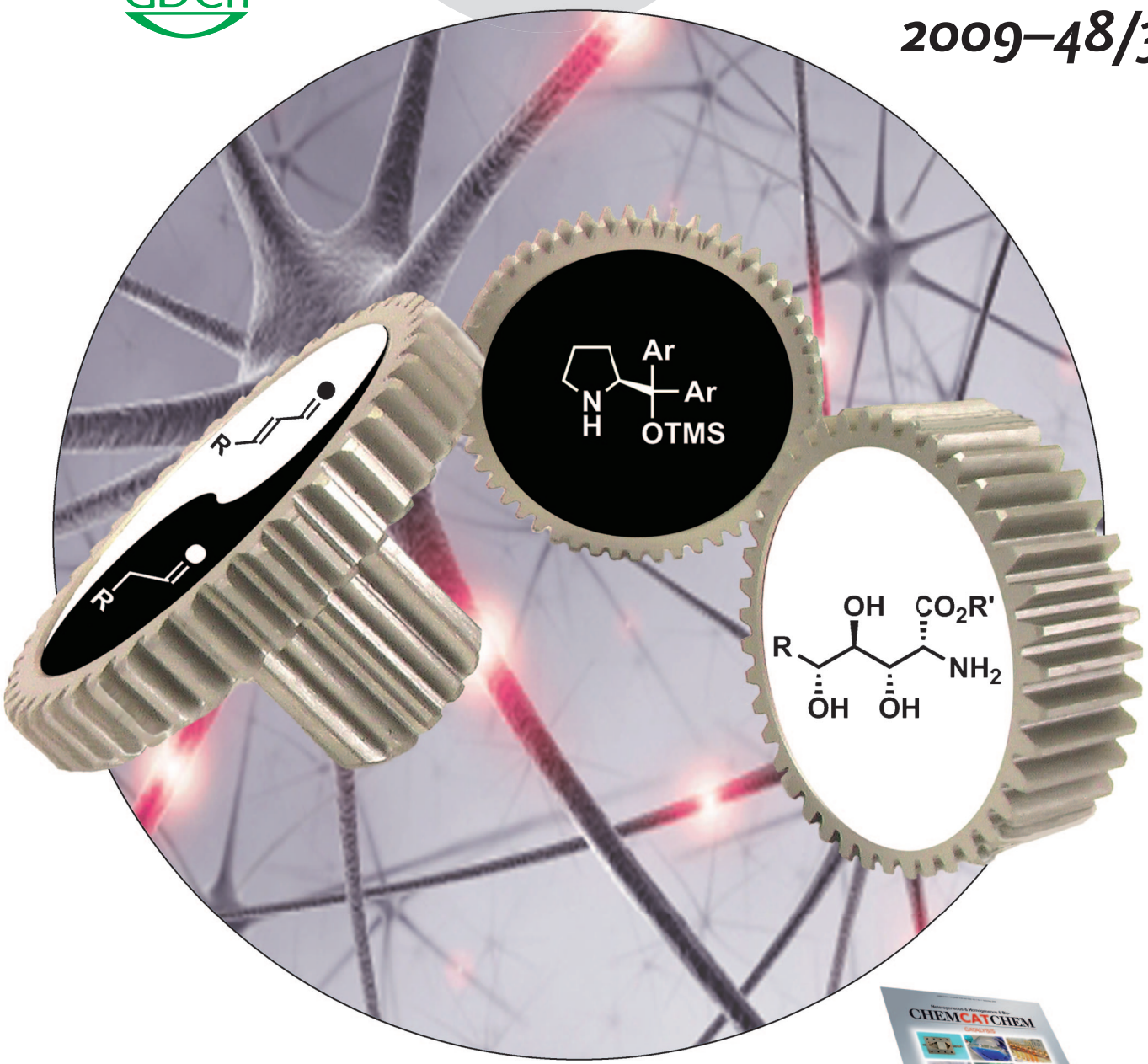
Angewandte Chemie

International Edition

GDCh

www.angewandte.org

2009–48/37



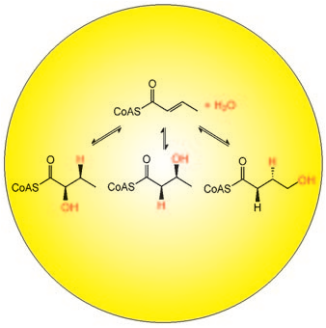
ACIEFS 48 (37) 6741–6922 (2009) · ISSN 1433–7851 · Vol. 48 · No. 37

WILEY-VCH

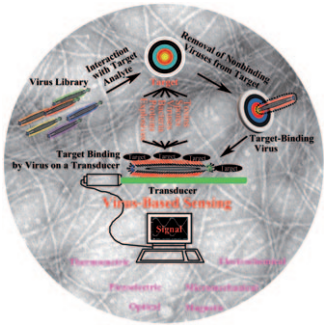
Cover Picture

Hao Jiang, Petteri Elsner, Kim L. Jensen, Aurelia Falcicchio, Vanesa Marcos, and Karl Anker Jørgensen*

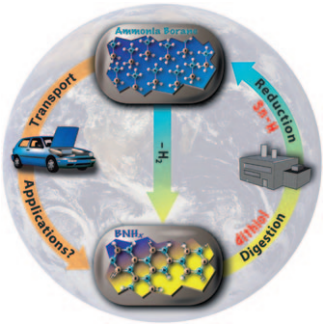
The gearing of an organocatalyzed chiral leaving group multiple cascade reaction strategy achieved molecular complexity in an efficient manner. As described by K. A. Jørgensen and co-workers in their Communication on page 6844 ff., the biologically inspired reaction led to 4,5-disubstituted isoxazoline-*N*-oxide products; the versatility of such building blocks is exemplified by the de novo syntheses of *Ribo*-phytosphingosine, an amino sugar, and polyfunctionalized α-amino acid derivatives.



Enzyme Mechanisms
Radical enzymes allow reaction pathways that are not possible with two-electron steps. W. Buckel describes, in his Minireview on page 6779 ff., new synthetic methods with enzyme mechanisms which are based on the recycling of a radical or an electron.



Sensors Based on Viruses
Viruses—particularly bacteriophages—can be genetically modified to present foreign proteins on their surfaces. C. B. Mao and co-workers describe in their Review on page 6790 ff. how such viruses can be used as probes in sensors.



Hydrogen Storage
Ammonia–borane is a potential H_2-releasing fuel for the hydrogen economy. In the Communication on page 6812 ff., D. A. Dixon, J. C. Gordon, et al. describe a method for regenerating polyborazylene, the predominant product of ammonia borane dehydrogenation.